

Monitoring Data Record

Project Title: B-3856 (Br. #335 over Mud Creek) COE Action ID: 2007-1871-345

Stream Name: UT's to Mud Creek (Sites 1 & 3) DWQ Numbers: 070798

City, County and other Location Information: Henderson County, Bridge No. 335 over Mud Creek and approaches on SR 1238 (Pearl Lane)

Date Construction Completed: August 2008

Visual Monitoring Yearly: (1) of 3

Ecoregion: _____ 8 digit HUC unit: 06010105

USGS Quad Name and Coordinates: _____

Rosgen Classification: _____

Length of Project: Site 1: 215 ft. & Site 3: 165 ft. (Total 380 ft.)

Urban or Rural: Rural Watershed Size: _____

Monitoring DATA collected by: M. Green and J. Young Date: 8/10/09

Applicant Information:

Name: NCDOT Roadside Environmental Unit

Address: 1425 Rock Quarry Rd. Raleigh, NC 27610

Telephone Number: (919) 861-3772 Email address: mlgreen@ncdot.gov

Consultant Information:

Name: _____

Address: _____

Telephone Number: _____ Email address: _____

Project Status: Complete

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level 1 2 3

Monitoring Level 1 requires completion of *Section 1, Section 2 and Section 3*

Permit States: The permittee will visually monitor the vegetative plantings to assess and ensure complete stabilization of the mitigation stream segments. The monitoring shall be conducted annually for a minimum of three (3) years after final planting. Photo documentation should be utilized to document the success of the riparian vegetation and the results submitted in a final report to DWQ within sixty (60) days after completing the monitoring. After three (3) years a site visit shall be conducted by DWQ staff to "close out" the mitigation site.

Section 1. PHOTO REFERENCE SITES

Total number of reference photo locations at this site: Site 1: 3 photo point locations, 2 photos at each location Site 3: 3 photo point locations, 2 photos at each location.

Dates reference photos have been taken at this site: 8/10/09

Individual from whom additional photos can be obtained (name, address, phone): _____

Other Information relative to site photo reference: A site map with approximate photo point locations is attached with this report.

If required to complete Level 3 monitoring only stop here; otherwise,

Section 2. PLANT SURVIVAL

Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):

Estimated causes, and proposed/required remedial action:

ADDITIONAL COMMENTS: Seedlings noted on the streambank and in the floodplain consisted of black willow, silky dogwood, tulip poplar and tag alder. Other vegetation noted consisted of *Juncus* sp., jewelweed, sedge, pokeberry, lespedeza, and various grasses. NCDOT will continue to monitor vegetation at these two stream relocations.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

This is the 1st year of monitoring for the Unnamed Tributaries to Mud Creek. Site 1 had experienced some localized bank scouring along the upper portion of the stream but the channel bed appears to be holding grade. Site 3 appears to be stable throughout the entire length of the stream relocation. NCDOT will continue to monitor the Unnamed Tributaries to Mud Creek.

| Date Inspected | Station Number | Station Number | Station Number | Station Number | Station Number |
|--|-------------------------|----------------|----------------|----------------|----------------|
| 8/10/09 | 11+00 (Site 1) | | | | |
| Structure Type | . | | | | |
| Is water piping through or around structure? | | | | | |
| Head cut or down cut present? | | | | | |
| Bank or scour erosion present? | Localized Bank Scouring | | | | |
| Other problems noted? | | | | | |

Site 1



Photo Point #1 (Upstream)



Photo Point #1 (Downstream)



Photo Point #2 (Upstream)



Photo Point #2 (Downstream)



Photo Point #3 (Upstream)



Photo Point #3 (Downstream)

Year 1 – August 2009

Site 3



Photo Point #1 (Upstream)



Photo Point #1 (Downstream)



Photo Point #2 (Upstream)



Photo Point #2 (Downstream)



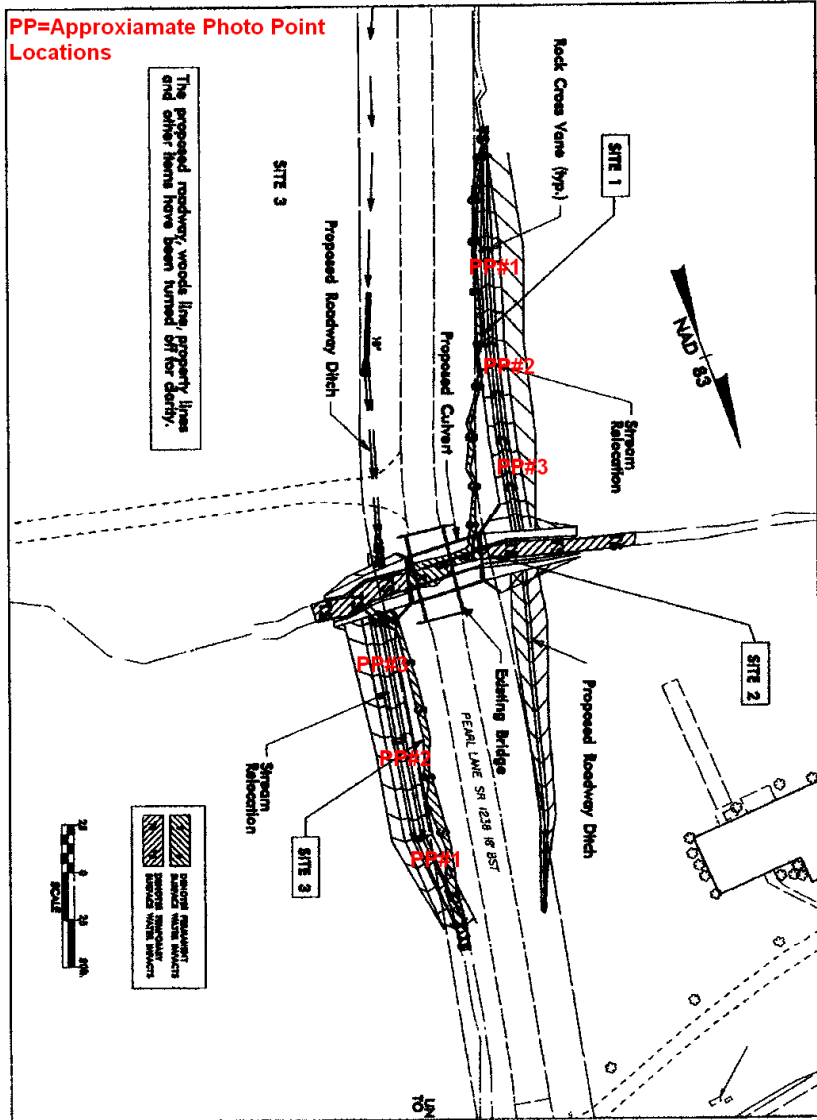
Photo Point #3 (Upstream)



Photo Point #3 (Downstream)

Year 1 – August 2009

Enlargement



Permit Drawing
Sheet 12 of 14